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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,081	02/27/2004	Kenshi Aihara	AIHARA1	4296
1444	7590	02/23/2006	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			PRESTON, ERIK D	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/787,081

Applicant(s)

AIHARA, KENSHI

Examiner

Erik D. Preston

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,10 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 11 is objected to because of the following informalities: It is dependent upon a nonexistent claim 12. For examination purposes, claim 11 will be interpreted as being dependent upon claim 10. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1,2,4-6,10 & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizutani (US 5602432).

With respect to claim 1, Mizutani teaches a vibrator comprising: A coreless coil (Fig. 5, #2); a driver including a magnet (Fig. 5, #3) inserted in said coreless coil, a yoke (Fig. 5, #45) for sandwiching said coreless coil and opposing said magnet and a top plate (Fig. 5, #30a); and at least one suspension (Fig. 5, #40) for resiliently carrying said driver, wherein the at least one suspension comprises a pair of right and left plate springs (Fig. 5, #43), in which one end of each plate spring is fixed, and another end of each plate spring is opened, said driver being supported by the opened other ends of the pair of plate springs, and wherein an alternate current (Col. 12, Lines 6-10) is applied to said coreless coil to generate vibrations by reciprocation of said driver in an axial direction of said coreless coil.

With respect to claim 2, Mizutani teaches the vibrator of claim 1, wherein said driver includes a weight (Fig. 5, #11) attached to said yoke.

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With respect to claim 4, Mizutani teaches the vibrator of claim 1, wherein the pair of right and left plate springs are disposed axisymmetrically and the driver is reciprocated in the axial direction.

With respect to claim 5, Mizutani teaches the vibrator of claim 1, wherein the pair of right and left plate springs are disposed to support said driver in which said driver is reciprocated in the axial direction.

With respect to claim 6, Mizutani teaches the vibrator of claim 1, wherein said coreless coil, the driver and the said at least one suspension are contained in a case (Abstract).

With respect to claim 10, Mizutani teaches a vibrator having an elongated length (its diameter is elongated with respect to its thickness) comprising: A coreless coil (Fig. 18, #2); a driver including a magnet (Fig. 18, #3) inserted in said coreless coil, a yoke (Fig. 18, #30a & 30b) for sandwiching said coreless coil and opposing said magnet and a top plate (the center of the Fig. 17, #7); at least one suspension (Fig. 18, #7) for resiliently carrying said driver, wherein the at least one suspension comprises a first pair of plate springs (two of Fig. 19, #72) disposed in a substantially common plane perpendicular to the axis of said coil and on opposite sides of said driver and extending lengthwise of said vibrator, an end of each of said springs distal from said vibrator being anchored and an end of each of said plate springs proximal to said vibrator being unanchored and supporting said driver, whereby opposite portions of said driver are supported by said proximal ends of said plate springs; and means for applying alternate

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current (Col. 12, Lines 6-10) is applied to said coreless coil to generate vibrations by reciprocation of said driver in an axial direction of said coreless coil.

With respect to claim 11, Mizutani teaches the vibrator of claim 10, further comprising a second suspension (Fig. 18, #70) for resiliently carrying said driver and disposed along a plane parallel to the plane of said first pair of plate springs.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 7 & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizutani (US 5602432) in view of Perkins et al. (US 6359371).

With respect to claim 7 Mizutani teaches the vibrator of claim 6, wherein said case includes a frame (as seen in Fig. 5) having an opening for surrounding the driver (the opening) surrounds the driver, a base (Fig. 5, #1) for fixing the coreless coil and closing one side of the opening of the frame, but it does not teach a protector for closing another side of the frame. However, Perkins teaches a pager including a vibrator (Fig. 7, #10) with an enclosed casing (as seen in 6E & 7, #600) it would have been obvious to one of ordinary skill in the art at the time of the invention to include the vibrator of Mizutani in an enclosed pager casing such as is taught by Perkins because enclosed casings are used to protect the internal electrical components of a pager.

With respect to claim 8, Mizutani in view of Perkins teaches the vibrator of claim 7, wherein said case has a spacer (Fig. 6, #10), said suspension being pinched between the spacer and the frame.

***Response to Arguments***

Applicant's arguments with respect to claims 1,2 & 4-8 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 2280610, US 3075101, US 3360704, US 4120617, US 4318016 & US 6538799

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik D. Preston whose telephone number is (571)272-8393. The examiner can normally be reached on Monday through Friday 8-5.

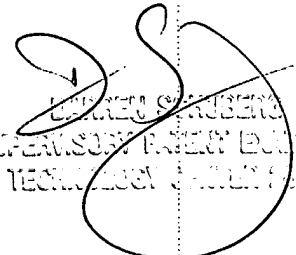
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571)272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



01/13/2006



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TECHNICAL FIELD: 2834